

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:	)	Docket 97-DC&CR-1
)	
Informational Proceeding to Develop	)	NOTICE OF
Recommendations for Amending the Energy	)	STAFF'S REBUTTAL TO PARTIES'
Commission's Responsibilities and Activities	)	COMMENTS ON THE COMMITTEE
Related to Data Collection, Analysis,	)	HEARING ON 5-10-99 And
and Dissemination	)	THE AD HOC INFORMATION
	)	Committee Report On:
Proposed Amendments to the Energy	)	<i>Proposed Generation Reporting</i>
Commission's Regulations Pertaining to	)	<i>Requirements: Quarterly Generator</i>
Data Collection and Disclosure of Energy	)	<i>Output And Fuel Use</i>
Commission Records)	
)	

**Staff's Rebuttal to Parties' Comments On
The Ad Hoc Information Committee Hearing on May 10, 1999
And
The Committee's Report on
"Proposed Generation Reporting Requirements:
Quarterly Generator Output and Fuel Use"**

July 13, 1999

Introduction

On May 10, 1999, the Ad Hoc Information Committee held a hearing for comments on its April 28, 1999 *Proposed Generation Reporting Requirements: Biennial Power Plant Characteristics And Quarterly Generator Output And Fuel Use* report.¹ On June 7, 1999, parties filed written

¹ Ad Hoc Information Committee, CEC Docket 97-DC&CR, April 28, 1999, hereto referred to as the April 28th Report.

comments on the April 28th Report and the May 10th hearing. In this paper staff rebuts parties' comments. Staff's rebuttal is organized into two sections. First, staff replies to common themes found in parties' comments. Then, staff replies individually to selected comments by parties.

Prior to our rebuttal, staff believes there is a need to address two questions that continue to permeate parties' comments. What is the purpose of the information collected? What authority does the Energy Commission have to collect it? These questions have been addressed in the record and were answered in the *Ad Hoc Information Committee Report On The Energy Market Information Proceedings*.² The full Commission agreed with the conclusion and findings in this report by adopting it at the June 24, 1998 Business Meeting. In the report it was stated that:

The Committee finds that restructuring of the electric-industry, in and of itself, does not eliminate the need for the Commission's electric industry monitoring and policy-development functions as required by statute.

The Committee concludes that restructuring of the electricity industry does not change the Commission's authority to collect data necessary for electricity industry monitoring and policy development.

Some parties have argued that before data collection can begin each and every single analysis that the Energy Commission might do needs to be identified, described and a costs/benefits test performed. Staff argues that a case by case revision would be duplicative, wasteful and prohibitive in terms of time and resources. The purpose of this current Energy Commission proceeding has been to conduct an aggregate review and determine cumulative net benefits and costs. Staff and the AHIC Committee have spent considerable time and effort in this proceeding to delineate the type of electricity system analysis and specific issues that the Energy Commission is either in the process of conducting or plans to conduct the near future. The benefits of which have been weighed against relative costs of the proposed data regulations.

The major tool the Energy Commission has used for advocating energy policy is its *Electricity Report (ER)*. Prior to the start of previous electricity report proceedings an *ER* Committee decided which policy topics, beyond those mandated in the Warren-Alquist Act, would be addressed. Then, within the proceedings, Common Forecasting Methodology (CFM) Form and Instructions were created to collect the necessary data with which to analyze (i.e., model) the policy topics so that staff could provide recommendations.

Operating within this structure, staff can only anticipate the nature of the analyses that we may be called upon to do in upcoming *California Energy Outlooks*. By examining the record of the AHIC proceeding and other sources, we do anticipate that the AHIC Committee, Energy Commission and Legislature have indicated a need for regional analyses of prices, system reliability, transmission congestion, air quality, and system benefits.³ Examples of regional analyses that staff may be called upon to do include:

² Ad Hoc Information Committee, CEC Docket 97-DC&CR, June 12, 1998, pp. 5-7.

³ See *Staff Comments On The Ad Hoc Information Committee Hearing On May 10, 1999 And The Committee's Report on "Proposed Generation Reporting Requirements: Quarterly Generator Output and Fuel Use"*, Docket 97-DC&CR, June 7, 1999.

- price versus cost analysis north and south of path 15, and by congestion regions throughout the state such as in San Diego, San Francisco, Humboldt Counties, etc.;
- pollution transport corridors between air quality districts, for example reduction of pollution from generation plants in South San Francisco transported to Monterey Bay;
- generation emissions in air quality basins; and,
- natural gas availability for use as a generator fuel in various counties throughout the state.

The analyses performed as part of past *ERs* and future California Energy Outlooks and many of the information dissemination products are, in fact, public goods. These analyses and products are requested because they provide important information to policy makers and market participants that otherwise would not be available. The question simply becomes, do the Energy Commission's California Energy Outlook and information dissemination products have value? The Commission has determined that they do. Not only have all the core functions been ratified; the Legislature is mandating specific products. For example Supplemental Language Item 3360-001-0465 to the 1999-2000 State budget requires:

Not later than March 1, 2000, the Energy Commission, Public Utilities Commission, and Electricity Oversight Board shall submit a report to the Legislature that presents a five-year prospective analysis of electricity reliability issues. The report shall include a plan to address these issues that propose alternative combinations of conservation and energy efficiency programs, investment in transmission capacity expansion, and other appropriate actions. The report shall include a cost estimate of each proposed solution and shall recommend adoption of one of the options.

To do this type of analysis, staff relies upon system modeling. The regional benefits of alternative combinations of conservation and energy efficiency programs, investment in transmission capacity, and other appropriate actions must be weighed not only against their costs, but also the cost of generation.

Debate will surround the recommendations resulting from this analysis, and future requests; but it should not be about the models' inputs, which will be the case if staff rely upon estimates instead of as much actual data as is needed to "adequately model the electricity system".⁴ The debate should focus on the proposed solutions and corresponding policy options. Debate focusing mainly on the policy options, which is where the focus should be, will only occur if the inputs to the models are accurate, up-to-date, and calibrated to actual occurrence.

The proposed generator reporting requirements, therefore, are not driven by the data elements used in the model, as some parties to this procedure have claimed, but as a means to provide solid policy options without the need to debate inputs. It is the analysis and consequent policy development that drive the need for data, not the mere fact that staff processes the models and needs to use them. In order to perform the aforementioned analyses, staff relies upon various

⁴ Ad Hoc Information Committee, CEC Docket 97-DC&CR, April 28, 1999, p. 7.

models. The data needed to run these models must include information that will enable the analyst to distinguish, with a high degree of probability, which regional generation units are running, where, when, and at what capacity. Inability to distinguish which units are running, where, when, at what cost and level of capacity will lead to erroneous and highly contestable near- to mid-term policy recommendations regarding prices, system reliability, transmission congestion, air quality, the value of energy efficiency programs, system benefits, etc.

Common Themes in Parties' Comments

In this section staff rebuts six common themes that have appeared in one form or other in parties' June 7, 1999 comments and/or at the May 10, 1999 Committee Hearing: 1) data is available from other sources; 2) the proposed regulations increase reporting burdens 400 to 1,200 percent; 3) sampling is a viable alternative for collecting power plant characteristics; 4) marginal costs have no meaning in a deregulated market; 5) the proposed method for collecting fuel cost data is confusing; and, 6) release of confidential data is harmful.

1. Data Available From Other Sources

In this sub-section Staff discusses the availability of data from other sources and the shortcomings of those data sources in meeting the needs of the Energy Commission. We first discuss the generator output and fuel use requirements. Then we discuss the plant characteristics' requirements. Discussion of various individual data elements is provided in the section rebutting individual party comments.

Prior to those discussions, however, staff makes two points. First, the Energy Information Administration (EIA) is planning a major revision to its entire electricity data collection system in 2000 and 2001. Changes would take effect with annual 2001 data reported in early 2002 and "flow data" collected on a monthly or quarterly basis beginning January 1, 2002.⁵ The Federal Energy Regulatory Commission (FERC) is currently reexamining the reporting requirements of utilities and non-utility generators. Therefore, creating data reporting regulations that relied solely upon the submission of data required by EIA, FERC or other agencies will not work. Such requirements could prevent the Energy Commission from performing its mandated functions. Needed data elements may disappear as agencies change their reporting requirements, and the time frame for which the data is collected and reported may change. Second, at the May 10, 1999, hearing, Commissioner Moore directly asked parties to identify specific locations of alternative data sources. Parties, however, provided only vague references to alternative sources. They did not indicate whether the alternative source has the data on a web site, in a database, or, is available only as hard copies. Parties did not indicate the time in which the data became available. Parties did not provide sufficient information as to whether the alternative source of the data considers its information confidential nor were the types of arrangements necessary for staff to have access to confidential data discussed.

It has been staff's experience that when other agencies have confidential data it is very difficult and time consuming to gain access to this data. Other agencies take protection of confidential

⁵ Jaske, Michael, Energy Commission Staff Memo Of July 2, 1999: CEC/EIA Meeting on Cooperation in Energy Data Collection and Use Held June 21, 1999.

data very seriously, just as the Energy Commission does. In order for staff to obtain confidential data from other state agencies several steps are involved. First, staff must identify the correct contact person at the other agency. This usually involves several levels of management. Second, staff must identify each and every data element needed. Third, Energy Commission's legal office must create an interagency agreement identifying the data elements, the analyses in which the data will be used, and the staff within the Energy Commission that will have access to the data. And finally, the agency providing the confidential data must make the providing entity aware of the interagency agreement and in certain cases get their permission before releasing the data. This process is a very inefficient means of data collection, and it needs to be repeated each and every time data is updated or used for different analyses. Moreover, the process itself is only applicable between state agencies. This is no mandate providing interagency agreements between state and federal agencies, or between state and public benefit corporations such as the Power Exchange (PX) and the California Independent System Operator (ISO).

The AHIC Committee's data collection principles not only called for less burdensome and less costly data collection methods for reporting entities, but also for overall efficiency. Requiring staff to collect data from the various sources of power plant characteristics and populating and maintaining these databases result in no burdens/costs for generators, but imposes resource commitments/costs on staff that are not efficient. The proposed regulations already commit staff to a great deal of new work. First, we have to develop databases and analysis methodologies for approximately 425 interconnected loads. The database work includes developing security and aggregation protocols to insure data confidentiality. Second, we have to develop generic values by technology type for ten data elements in the plant characteristic database applicable to the approximately 500 facilities of size 1 MW or greater but less than 50 MW. This work will include setting up workshops and monitoring alternative data sources. Third, we have to populate the initial plant characteristic databases for the approximately 209 facilities 50 MW or greater. Requiring staff to continually query all alternative sources for updates to the 50 MW or greater facilities would be inefficient. In staff's opinion the data elements of 50 MW or greater facilities are most crucial and need to be as accurate and forward-looking as possible. It would be inefficient for staff to try and maintain this portion of the database without data requests, especially since generators have this information as part of their normal business operations.

Generator Output and Fuel Use Data

Historical generator output and fuel use data is used by the Energy Commission in producing the Net System Power (NSP) Report, California Energy Outlook, California Natural Gas Outlook, Biennial Fuels Report and disseminated internally and externally. Aggregated generation by fuel type is provided to the California Department of Finance for use in California's Statistical Abstract. The data is also provided to various Energy Commission staff, aggregated in a variety of ways, to assist in analyses of PIER programs, energy efficiency programs, RD&D programs, air quality impacts, etc. Aggregated generation data is provided to the public as part of the Energy Commission's information dissemination function. And, the generator output and fuel use data is used to benchmark staff's models so that when producing regional analyses of prices, system reliability, transmission congestion, air quality, and system benefits we can test the validity of the modeled results against historical occurrence.

Virtually all of the proposed generator output and fuel use data elements are collected by EIA or FERC. The submission of EIA or FERC filings is provided as a compliance option to make it easier for parties to meet Energy Commission filing requirements, this is not, however, a guiding principle behind the proposed data requirements. The primary problem with using data from other agencies is that many of the filing dates and the time availability of the reported data extend beyond dates needed for Energy Commission purposes. This is especially true for the NSP Report and Commission Energy Outlooks (CEO). Senate Bill 1305 mandates that the NSP label for the previous year be produced and adopted by the Energy Commission on or before April 15th of each year. The new CEO reports are expected out in the spring. These requirements, alone, eliminate using EIA reporting requirements in lieu of Energy Commission requirements. But, as the Committee has indicated, EIA forms may be used as a compliance option in meeting the proposed generator output and fuel use reporting requirements so long as they meet the proposed data requirement and are filed at the Energy Commission on time schedules in the proposed regulations.

Biennial Power Plant Characteristics

Power plant characteristics are major inputs to staff's generation system models. Model results are used in regional analyses of prices, system reliability, transmission congestion, air quality, and system benefits. The results from the analyses are then used to formulate policy recommendation options for the Energy Commission's various committees (i.e., the Siting Committee, the Electricity Committee, etc.) and other State policymakers. In order to produce viable policy options in the near- to mid-term, models of the electricity system must reflect conditions that will exist in the future. As such, power plant characteristic data elements must reflect conditions that the power plant operators/owners are aware of and would use in their own business operations. To the best of staff's knowledge, these forward-looking data are not readily available elsewhere.

Many of these data elements are reported to the EIA, FERC, ISO, PX, County Assessors Offices, and the State Board of Equalization. There are, however, four shortcomings with parties' proposals that staff collect the data from these alternative data sources rather than having the reporting entity submit the data directly to the Energy Commission through the biennial update process. First, as described earlier in this section, it is an inefficient method of data collection. Second, the data these agencies have contain historical information. To be useful for near- to mid-term policy analyses, power plant characteristics need to be forward looking. Third, due to potential changes in due dates and data reporting requirements of other agencies, the Energy Commission places itself at risk of not having access to the data. The Energy Commission is in a much better position in being able to perform its mandated functions if it has its own regulations and allows the use other agencies' forms as compliance options. Fourth, the ISO and PX have their own data rules and treat many of the plant characteristic data elements confidential. Staff has had no success in getting this data.

As parties have claimed, some of the plant characteristic data elements are market sensitive and are considered confidential by this and other agencies. Staff's collecting of this confidential data from various agencies, for data that does exist and is retrievable on a time schedule useful for Energy Commission purposes, would be inefficient for both the Energy Commission and

generators. As implied in the previous section it is much simpler and probably collectively less expensive for the entity with a reporting requirement obligation to EIA or some other agency to simply update once every two years the plant characteristic database. If staff tried to get the information from another agency and it treats the data as confidential, the agency might need individual permission of generators to release the data. This would entail another round of paperwork for both staff and generators.

Plant characteristic data that other agencies hold are historical information. The motivation for having plant characteristic databases that are updated once every two years by generators is twofold. First, the historical data available on power plant characteristics reflect operations of the plants under the regulated monopoly regime, not operation under the newly restructured market. Staff expects different operational patterns for the divested plants operating in the competitive generation market. Second, updates of the data elements should be forward-looking to reflect changes in operations that power plant operators are aware of or anticipating as part of their normal business operations. For example, if a generator knows that the plant is going to be retrofitted with new emission controls, then the emission factor data element of the plant characteristics can be updated to reflect this information. Or, if the retrofit results in a more efficient plant, then the heat rate by block data elements can be updated. Such forward-looking data elements are more useful in producing policy options analyses for the near- to mid-term than are static historical data and they can be accurate. As Mr. Frank Sandifer indicated at the May 10th Hearing. "I think they [engineers] do a very good job of testing. They have in the past. They've [the engineer's estimates of heat rates] stood up to the test of time."⁶

2. Proposed Regulations Do Not Substantially Increase Reporting Burdens

Parties overstate the increased burdens of complying with the proposed generator output and fuel use reporting requirements on two fronts. They make the wrong comparisons. And they fail to quantify the costs.

The Energy Commission has made the determination that it needs these data and has the legal authority to collect data from all generators.⁷ Therefore, comparison of regulatory burdens should be made to current Energy Commission regulations, which if unchanged would apply to all generators. When that comparison is made, Staff believes the Committee's proposal streamlines and reduces the overall burdens for the industry from those currently in place even if individual respondents have more responsibilities than they did previously. These data requirements are certainly minor costs of doing business in the restructured electricity market; whereas, the public benefits are large. The benefits being policy recommendations that insure the State's citizens and business receive the benefits from restructured.

Parties have argued that their reporting requirements will increase 1,200 percent for those data elements that are file annually with EIA but would be filed quarterly (with monthly data) as a

⁶ Transcript of AD HOC INFORMATION COMMITTEE HEARING on PROPOSED GENERATOR REPORTING REQUIREMENTS hearing, Monday, May 10, 1999, p. 48. (hereto referred to as the May 10th Transcripts)

⁷ Adoption by the Energy Commission of **Ad Hoc Information Committee Report On The Energy Market Information Proceeding**, Docket 97-DC&CR, June 12, 1999, p. 5.

compliance option at the Energy Commission. They fail however to attach to these burdens any estimate of increased costs in the form of time or money. Fortunately, there are time estimates available. EIA has estimated the public reporting burden of form 867, now 860B.

Public reporting burden for this collection of information is estimated to average 2.12 hours per response. Including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Using EIA form 860B as a compliance option under the proposed regulation would require approximately three-person days for each facility ($2.12 * 12$), a relatively minor cost in time. This estimate of the time needed to comply with the proposed regulations overstates the burden because the databases from which the data elements are extracted already exist. The parties' claims of increased reporting burdens are unsupported allegations.

Increasing the frequency from yearly to monthly will not increase the reporting burden 4 to 12 times because a large part of the burden is creation and maintenance of databases. Parties have these databases for internal cost accounting purposes and reporting annually to EIA and other agencies. Staff can only conclude that the incremental costs are minor. We do agree that filling out the appropriate portions of EIA forms, as compliance options, could require minor resource commitment for reporting entities. Staff believes that electronic procedures could be put in place to streamline the manner in which data requirements are met.

3. Sampling Is Not A Viable Alternative For Collecting Power Plant Characteristics.

For the 50 MW and greater facilities parties have argued that statistical sampling should be used to populate the data elements of the plant characteristics database. There are four reasons why statistical sampling of power plant characteristics for facilities of this size will not work. First, plant diversity by geographic region, age, maintenance, retrofits are such that the variation in the population is so large that the number of sample points needed would approach the population and be extremely costly. Second, parties would still put forth all of their arguments for not giving us the data for their plants, that by chance, became part of the sample. Third, sampling violates the equal reporting requirements for all players in the market with similar functions because some generators would incur the costs of being part of the sample, whereas, others would not. Fourth, data from those generators that were part of the sample would become even more market sensitive. Non-sampled generators would not have to worry about disclosure of their data and thus might be motivated to fight for disclosure of others, instead of having a united industry front for data confidentiality.

4. Marginal Costs Have No Meaning In A Deregulated Market

Assembly Bill 1890 (**AB 1890**) put into place mechanisms by which competition would replace regulation in determining the generation price component of electricity service. This was the major premise behind restructuring; competition would cause the price of electricity to better reflect its marginal cost of production bringing economic benefits to the State's citizens and businesses.

The Energy Commission was an advocate of this type of market structure result in its *1996 Electricity Report*.⁸ The Energy Commission also committed itself to monitoring the new market⁹ for conditions that may cause divergence between market clearing prices and marginal costs after the market began in 1998, as a means to assess efficiency. Divergence of prices and marginal costs will send wrong signals to market participants. “The [restructuring] of the electricity industry was largely motivated by the hope that a competitive market would lead to more prudent investment decisions than those produced under regulation. For this hope to be realized, market prices must reflect the underlying economic conditions of the industry.”¹⁰

Non-economists often misunderstand marginal cost theory, believing that marginal cost bidding will not result in recovery of fixed and variable costs. Nowhere in economic theory is it stated that a producer sells each unit at its marginal costs. The theory indicates that under competitive conditions the last unit sold by the marginal bidder will be equal to its marginal costs. Therefore, for all of the units sold, except for that of the last unit sold by the marginal generator, price will be above marginal costs. It is this gap that will enable producers to recover fixed and variable costs, including a normal return on investment. Producers that do not have market power will find that in the short-run they will be able to maximize their profits or minimize their losses by bidding their marginal costs so long as the market clearing price exceeds average variable costs. The actual performance of the market in comparison to staff’s initial modeling results has shown in the non-peak periods, which accounts for more than 80 percent of the time, prices from the PX do reflected marginal costs.

Staff agrees that there are external, non-market strategies that may be developed by generators due to cogeneration/thermal heat load requirements or contract requirements¹¹; the prior are relatively minor and the latter are not expected to last beyond expiration of the contracts. Cogeneration is about 19 percent of industrial consumption and an even smaller portion of total generation. Cogeneration can also be modeled such that it does not interfere with the determination of least-cost bid dispatch. Contract requirements that diverge from the market-clearing price will not last because a generator receiving a contract price that on average is below the market-clearing price will not renew. Whereas, a customer paying a contract price that on average is greater than the market-clearing price will not renew. Non-market strategies based on differences between PX price and ISO ancillary service prices will not last. Over time price, differences in the PX and the ISO ancillary service market will disappear, as the rules are refined and generators learn how to arbitrage the difference.¹² Some generators will have must-run or qualifying facility contracts that will cause a divergence between PX prices and marginal costs. These contract effects can be modeled, which is why contract type is one of the data elements in the plant characteristic database.

⁸ California Energy Commission Electricity Report, November 1997, p. 14.

⁹ *ibid.*, p. 25.

¹⁰ Severin Borenstein, James Bushnell, and Frank Wolak, Diagnosing Market Power in California’s Deregulated Wholesale Electricity Market, February 1999, p. 9.

¹¹ Comments of the Independent Energy Producers Association On The Ad Hoc Information Committee’s Report On Proposed Generator Reporting Requirements: Biennial Power Plant Characteristics and Quarterly Generator Output and Fuel Use, June 7, 1999, p. 5.

¹² Borenstein, et. al, pp. 12 – 15.

If generators find it more profitable to develop non-market strategies, that is, to consistently withhold power from the market when price exceeds marginal production costs¹³ or to raise bid offers above marginal production costs, there will be a divergence between price and marginal costs. It is the size and duration of this difference that is of concern to the Energy Commission. When market prices are not aligned with the marginal costs of the last generation taken, decision making is distorted. “[Restructuring] of the electricity was largely motivated by the hope that a competitive market would lead to more prudent investment decisions than those produced under regulation.”¹⁴ Such prudent investment decisions will not occur if prices consistently diverge from the marginal costs of the last unit generated.

5. What Is The Proposed Method For Collecting Fuel Cost Data?

Parties to this proceeding have misunderstood the reporting requirement for fuel costs. There are actually two parts to collection of fuel costs. First, there is the requirement that facilities 50 MW and greater report historical monthly fuel costs on a quarterly basis. This data is similar to that required by FERC on form 423, which utilities have to file, and which for the time being non-utility generators are exempt. The exemption will continue as FERC determines the scope of its authority.

In recent decisions FERC has expanded its jurisdiction to include collection of market information from wholesale power marketers.¹⁵ FERC chairman James Hoecker stated,

This commission’s pursuit of increased competition in the power market raises the difficult issue of timely disclosure of key market information. As various entities compete for market share, it is important that regulatory requirements be appropriate and as comparable as possible.¹⁶

This quote was in regards to the contract-reporting requirements of power marketers and the decision is not yet effective, pending review of comments or requests for rehearing of the policy shift. Although not directly applicable to fuel costs, staff believes it is an indication that FERC is contemplating a reporting requirement doctrine similar to that proposed by the Ad Hoc Information Committee—comparable functions require comparable reporting requirements.

The second part of fuel cost reporting requirement is collection of information that will be used to forecast future fuel prices. It is this reporting requirement, as illustrated in appendix E of the April 28th Report, which most participants have misunderstood. Two kinds of data are requested for our forecasting efforts. One has to do with dispatch prices and the other is concerned with an estimate of the share of natural gas supply from the several possible supply sources.

Dispatch Decisions

In order to provide policy recommendations regarding the electricity system, staff needs to understand the fuel cost decisions used by generators to determine when to run their facilities. Is the total natural gas delivered price important for making that decision, or is it some other

¹³ Price would also have to be greater than the opportunity cost of selling power in another market.

¹⁴ Borenstein, et. al., p. 9.

¹⁵ California Energy Markets, May 28, 1999, p. 9.

¹⁶ Quote taken from California Energy Markets, May 28, 1999, p. 9.

indicator? A form, such as shown in Appendix E or modified somewhat as below, could be devised that would require the reporting entity to simply fill in a couple of boxes with either a check mark or appropriate percentages.

Table 1
Dispatch Decision Basis

Power Plant Site Name (Fill in the boxes with the appropriate percentage)	
1. Total Delivered Price	
2. Specific Market Price	
a. Topock Price	
b. Malin Price	
c. Wheeler Ridge Price	
d. California Production Price	
3. Combination of Supply Prices If a combination of the above prices are used, indicate in the box the percentage level each contributes to the dispatch price.	
4. If none of the above. Please describe the basis for dispatching	

Source of Natural Gas Supply

For some near term analysis and locational impact assessments, a separate natural gas price forecast for each generation location would be needed. In order to be able to prepare an individual price forecast for each generation site of interest, it is necessary to have an estimate of the supply mix coming from each supply source. A simple single table could be devised for which the filer would check off the range in percent of supply from each source that would be expected to take in the next five years. We would use our supply price forecast (weighted by the filer's supply factors) and our transport and distribution costs to forecast the individual prices.

This is a considerable departure from what was requested earlier in the process.¹⁷ A form, such as shown below and in Appendix E of the April 28th Report, could be devised that would require the filer to simply fill in a couple of boxes with a check mark.

TABLE 2
Estimated Future Natural Gas Supply Mix by Supply Source

Power Plant Site Name (Check the appropriate boxes)				
Supply Mix	California	Topock	Malin	Wheeler Ridge

¹⁷ Wood, Bill, et al., *Power Plant Fuel Cost, Air Pollutant Emission, and O&M Cost Characteristics*, Submitted for Consideration at the Ad Hoc Informational Committee Workshop on September 17, 1998, CEC Docket 97-DC&CR-1, September 4, 1998, pg. 3-4.

0-20%				
21-40%				
41 to 60%				
61 to 80%				
81 to 100 %				

Data Collected As Part Of Biennial Plant Characteristics

The data elements depicted here and in the two forms provided for illustrative purposes would be part of the biennial plant characteristics update every two years. These data are needed for Energy Commission staff to forecast the demand for natural gas by source of natural gas supply for electricity generation, and the natural gas dispatch and delivered price for electricity generation. The forecast of fuel demand by region becomes even more important in the new era of restructuring. It is one thing to forecast statewide fuel usage for generation purposes. It is another to make sure generation fuel is available to the various regions of the state.

In the past, utilities reported their fuel price contracts under CFM data collection in an *ER* proceeding. The illustrative forms in Appendix E of in the April 28th report and these slightly revised versions are attempts to collect similar information without requiring non-utility generators to file their fuel contracts.

Fuel cost data, such as historical and forecasted fuel prices and demand, are used at the Energy Commission for a number of reporting purposes including annual and monthly fuel price data.

Analytically, the historical natural gas prices are used to determine the current natural gas price trends and to compare this trend with the staff's forecasted natural gas prices for electricity generation. If near term differences in magnitude and trend can not be explained then the forecast is reexamined, and if necessary, adjustments are made.

Monthly historical fuel price data collection fulfills three staff needs. First, it allows staff to keep abreast of the current pricing. This allows the staff to gain a better understanding on what is driving or causing price changes and directions. Staff is then in the position to respond quickly to questions from our Commissioners, the Governor, the Legislature, or the public on such items as price volatility, seasonal trends, etc. Second, historical monthly price data, coupled with volume, is used to determine the historical annual electricity generation price for natural gas. Third, the historical monthly price is used to develop factors to convert our annual natural gas price forecast into a monthly one.

Knowing fuel costs contribute to cumulative assessment, location impacts, transmission capacity impacts, and energy efficiency alternatives. Collection of the fuel price data on a plant location basis will enable the staff to prepare monthly natural gas price forecasts for electricity generation. Natural gas prices are perhaps the single most important variable in analyzing the competitive market. Analysts make use of a current model design that brings generation online in merit order from least-cost bids (principally determined by natural gas price combined with heat rates). In combination with other plant characteristics these data elements are key pieces of information that will enable the analyst to distinguish, with a high level of probability, which regional units are running, where, when, and at what capacity.

In addition to general analyses identified through out this paper, knowing which units are running, where, when and at what capacity based on regional fuel cost estimates will allow for the following analyses.

- Evaluate, by location, impacts of generation facility’s operations on transmission reliability, voltage support, and congestion.
- Evaluate whether certain facilities, or groups of facilities, can cause market imperfections.
- Assist the CARB and local APCDs to assess the affects on emissions caused by physical power plant changes, proposed rule making, and specific programs such as recharging EVs.
- Evaluate the impacts of changes in marginal cost due to shifts in plant specific natural gas prices on the electricity market-clearing price.

The natural gas supply and price forecasts are prepared under legislative mandate¹⁸ in support of the Biennial Fuels Report.¹⁹ The forecast documentation is published in the staff’s Natural Gas Market Outlook. Because of the open, non-biased and informed forecasting process used by the Energy Commission, many natural gas market participants use and rely on these forecasts to assist them in making their market decisions. These entities include utilities, pipelines, independent power producers, state and federal government agencies, financial institutions, consultants, etc. Without the needed information, the Energy Commission, as part of its information dissemination function, would not be in the position to continue to prepare creditable forecasts for use by market participants.

6. Release Of Confidential Data

The Energy Commission has the ability to protect confidential data and has been collecting confidential data for years in the form of residential, commercial and industrial end-use surveys, utility load data, Petroleum Industry Information Reporting Act (PIIRA) data, etc. These data have been used in Commission hearings and for policy making without being released on an individual basis.

The fact that information is competitively sensitive does not relieve market participants of the obligation to provide the information needed by the Energy Commission to perform its functions. In fact, the Legislature has adopted a statutory scheme in the Public Records Act that allows state agencies to conduct their business while protecting confidential data. These protections negate the possibility that sensitive data will be obtained by others. The fact that these mechanisms are effective in allowing state agencies to both use and protect confidential data is confirmed by the long history of the Energy Commission has in collecting confidential data – under QFER, PIIRA, and other regulatory programs – without release.

¹⁸ Section 25310(a) of the California Public Resources Code.

¹⁹ The **Fuels Report** is a comprehensive report submitted to the Governor and Legislature describing emerging trends and long-range forecast for fuel consumption and price in the state.

If a situation arises in which a proposed Energy Commission policy decision rests upon confidential data, the Commission will be obligated to weigh the interests of holder of the information in protecting that confidential treatment with the public interest in participating in Energy Commission proceedings. This weighing of interests could result in a range of measures being imposed, depending on the nature of the proceeding, the role of the data in supporting the decision, and the types of interests affected. Confidential data can be protected by closed hearings, protective agreements, independent expert witness examination of analyses, as well as by denial of access.

Staff is confident that the Energy Commission can and will weigh the competing interests and impose appropriate restrictions to balance the interests of the participants in the proceeding. Concern that the Energy Commission may, at some point in the future, make the "wrong" decision about the appropriate balance of interests is not relevant to the question of what data to collect, and has no role in this rulemaking.

Rebuttal Of Specific Comments

In this section staff responds individually to parties' comments. In doing so we number the parties' comments as a convenient means of reference. The numbering system does not indicate any rank order of importance set by either staff or parties.

Rebuttal Of Independent Energy Producers Association's (IEP) Comments

IEP Comment 1

IEP questioned the rationale and necessity of imposing burdensome reporting requirements on generators²⁰ for the purpose “. . . to simulate the bidding strategy of each and every one of these (generation) units”.²¹ “In a deregulated world, optimized system dispatch on marginal cost basis has no meaning at all because dispatch is based on “bidding behavior” and not assumed variable costs.”²²

Staff's Rebuttal 1

IEP takes Staff's comments out of context and misrepresents staff's overall position when it quotes from the transcript. Staff was in fact addressing the Committee's request to “. . . talk about the model, and how we use the data, and what it [the model] gives you back”.²³ In clarifying staff's response we make the following points:

- The requested data allows staff to simulate how the California market might operate if participants collectively behaved in a manner consistent with economic theory underlying

²⁰ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 2.

²¹ Staff Comment, May 10th Transcript, pp. 69-70.

²² IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 2.

²³ AHIC Committee, May 10th Transcript, p. 41.

the move to competitive markets. The current model design brings generation online in merit order from least-cost bids. These least-cost bids reflect the marginal costs of the last block of energy taken from the marginal-bidder in various regions throughout the state.

- Knowing marginal costs allows staff to estimate PX prices under competitive conditions. This includes price estimates for the entire California market, various ISO transmission zones (e.g., north and south of path 15), and other regional analysis (e.g., analysis of prices, available generation and transmission in the San Diego, San Francisco, Humbolt Counties, etc.).
- The driving force behind deregulation was the desire to use a competitive generation market to achieve lower energy costs. That is, a better alignment of electricity prices to marginal costs. If market prices consistently exceed marginal costs then the market is not efficient. Some types of market imperfections exist and must be found and corrected. As part of the market monitoring function of the Energy Commission, the model results based upon least-cost bid dispatch allows Staff to compare realized market prices to the goal of economic efficiency.
- The degree to which prices differ from marginal cost is an indicator that market activity is deviating from the expected results, which would certainly be cause for further investigation and possibly mitigating policy recommendations.
- As staff has testified, and the Energy Commission has previously endorsed, having the requested data allows the Energy Commission to forecast, with a high level of precision, which generators will be running, when and where, and the amount of capacity that is available. This information will be used in determining: a) price differences among regions; b) transmission congestion by region; c) near- to mid-term reliability; d) emissions by air basins; e) analysis of cost-effectiveness of energy efficiency measures; f) effect of heat storms on the availability and reliability of generation; g) dual fuel & reliability; and, f) analysis of renewables and PIER programs.

IEP Comment 2

IEP does not support the Committee's Report because it inappropriately relies on the reporting of proprietary cost/price data in an unwarranted manner²⁴.

Staff's Rebuttal 2

The Energy Commission has stated that it will do regional analyses of electricity generation, transmission, reliability, etc. In order to perform these analyses on a regional basis staff's models must be able to determine which plants have a high probability of running, when, and the amount of capacity plants have available during any hour of the day. The only way analysts can do this is to model the system by simulating the marginal cost curves (least cost-bids) of individual plants and then producing a merit order of which plants are running, when and where, accounting for capacity and transmission constraints. Fuel costs and heat rates by block are

²⁴ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 3.

major determinants of marginal generation costs (i.e., least-bid dispatch). Therefore, these proprietary data elements are needed so that the Energy Commission can simulate the market and provide policy recommendations based on analyses that reflect regional operations of generating facilities.

The information required in Appendix E of the April 28th Report is needed so that staff can more accurately predict fuel prices. Forecasted fuel prices are then used by the Energy Commission in its Electricity Outlooks, and Natural Gas Outlooks as a means of recommending policy options concerning regional availability, prices, and reliability of the fuels required for generation of electricity. The Energy Commission (i.e., both the AHIC Committee and staff) understands the sensitivity of this information and has declared that trade secrets will be kept confidential.

IEP Comment 3

“Monitoring and understanding a competitive energy marketplace (distinct from an energy system) does not require nodal modeling of every generation unit. Indeed, after significant and lengthy debate in California by key stakeholders, including prominent economist and energy/transmission analyst, the parties determined that the ‘nodal approach’ seemingly recommended by the Committee Report was an inefficient and unwieldy approach to a market.”²⁵

Staff’s Rebuttal 3

As stated throughout the record, the proposed data regulations are for getting data the Energy Commission needs to carry out its market monitoring and policy development responsibilities. Staff will not be using a “nodal approach” in its analysis. The Committee has emphasized regional analysis.²⁶ Moreover, the proposed plant characteristics reporting requirements do not require specific data on each and every generator. It has a set of graduated reporting requirements. The combination of generic values by technology type for plants under 50 MW and the specific generator data on plants 50 MW or greater should result in system modeling that can determine, with a high level of probability, which plants are running, where, and at what capacity. The model results can then be used to formulate near- to mid-term policy recommendations regarding regional prices, system reliability, transmission congestion, air quality, fuel availability, system benefits, etc.

IEP Comment 4

“IEP notes that the Committee Report correctly minimizes if not eliminates the obligation of reporting proprietary price/cost data on generation units of less tha[n] 50 MWs. However, IEP notes that these units can and may determine the market-clearing price in any hour just as a large unit might.”²⁷

Staff’s Rebuttal 4

The above statement is a direct contradiction to statements made by IEP at the May 10th Hearing. In the hearing IEP stated:

I think you’ve done a good job on the exemption for the small guys [generators 50 MW or less]. I think it’s appropriate to create an exemption for the small folks. One, they are not really having any impact on the market structure as far as I can tell. They’re not clearing any markets. And the reporting requirements you’re talking about are significantly greater and more burdensome on the smaller units, I think, than on a bigger unit.²⁸

²⁵ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 4.

²⁶ AHIC Committee, CEC Docket 97-DC&CR, April 28, 1999, p. 19.

²⁷ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 4.

²⁸ Transcripts of the May 10, 1999 Hearing, CEC Docket 97-DC&CR, p. 72.

Staff's position is that while it is possible for smaller units to be marginal bidders, the probability of this occurrence is less than that of a 50 MW or greater facility. Staff's acceptance of generic values by technology type for plants less than 50 MW was a compromise. If IEP truly believes that facilities less than 50 MW will be the marginal generators most of the time, and proves to be correct, then staff recommends extending plant specific data requirement down to facilities 10 MW or greater. But if not, failure to distinguish which of the 50 MW or greater facilities are running, where, when, and at what level of capacity and with the highest degree of probability will lead to erroneous and highly contestable near- to mid-term policy recommendations.

IEP Comment 5

“...[T]here is still nothing in the Report that addresses the necessity for collecting proprietary cost/price data and how these data serve to enhance any of these [restructuring] goals. Further, nothing in the Report addresses the necessity for modeling every generator in the western grid (as proposed by staff) as cost-effective and least burdensome means to meet these goals.”²⁹

Staff's Rebuttal 5

This proceeding is part of a Order Instituting Investigation (OII), which has a record of evidence. The April 28th Report reflects the Committee's examination of that record. The report is not, and was not designed to be, all encompassing of the record. Staff believes that the accumulation of evidence in the record supports the need for collection of both proprietary and non-proprietary data. Furthermore, staff has not proposed modeling each and every generator in the western grid. The California restructured market is integrated and interconnected within a regional Western market and cannot be properly understood if analyzed as an isolated system.

- In the remainder of this response, staff restates the goals identified by the Committee in its April 28th Report and then provides examples of analyses required to provide policy recommendation.
- That the State's citizens and businesses achieve the economic benefits of restructuring.

The major premise behind restructuring was that competition would reduce the price of electricity to better reflect its production costs. Such economic benefits will not occur if the market exhibits imperfections. The industry will need to be monitored to insure that market imperfections do not exist. The one study done so far on imperfections in California's new electricity market relied on marginal cost data from the Energy Commission³⁰. This data was collected as part of the CFM process in ER 94, making it at least five years out of date.

The Legislature and Governor has also indicated an interest monitoring of economic benefits occurring at sub-regional levels within the state. Their interest includes:

²⁹ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 3.

³⁰ Borenstein, et. al., February 1999

Market Clearing Price Assessments

1. an assessment of the competitive wholesale energy market emerging in California and the Southwest over the next decade;
2. a 10-projection of San Diego's energy rates and comparison of those rates to other regions of California;
3. an analysis of whether and how lower cost energy might be made available to the San Diego region; and,
4. an analysis of options for bringing lower cost energy to San Diego.

Generation Assessments

1. reliability;
2. alternative combination of conservation and energy efficiency programs;
3. transmission capacity expansion; and,
4. cost estimates of alternatives.

California Energy Outlook 2000

1. analysis as mandated in the Warren-Alquist Act;
2. analysis as directed by the Electricity Committee; and,
3. analysis reflective of current issues.

Staff knows of no way to perform these analyses without the forward-looking data that would be collected under the proposed plant characteristics regulations.

- That new market structures provide competitive, low-cost and reliable electric service.

This goal will be reached only if market imperfections do not exist. Thus, it is incumbent upon the Energy Commission to be able to monitor the electricity market. Since the demand for electricity is highly inelastic, the fact that electricity cannot not be stored, and seven generation companies have the majority of market share, California's electricity market is much more susceptible to market imperfections than other markets, including the gasoline market.³¹

- That customers in the new market have sufficient information and protections.

The proposed data requirements are needed to perform the information dissemination function that the Energy Commission committed to in its February 25, 1999 response to the Legislative Analyst's Office for the Senate Budget Committee Hearing.

³¹ Borenstein, et. al, February, 1999 , p. 6.

1. Annual fuel mix, published in the state-mandated Power Content Label, which consumers can use as a basis for comparison with their electricity purchases, as part of administering the generation disclosure program (SB 1305. Sher, Chapter 796, Statutes of 1997).
 2. Analysis, technical assistance and forecasts provided to consumer and small business groups regarding opportunities for co-ops and aggregation services so they can take advantage of the new competitive market's benefits.
 3. Monthly summaries and interpretation of wholesale electricity prices and their implications for market participants. This report is regularly quoted as an authoritative source of information in major national newsletters. Annual projections of seasonal electric market clearing prices. Based on requests and website downloads [over 1,000 per month], these reports are [among] the most popular Energy Commission publications.
- That California's commitment to developing diverse, environmentally sensitive electricity resources is preserved.

Economically efficient choice among generation technologies, conservation programs, and transmission and distribution grid improvements can only occur by comparing the underlying costs of these alternatives, which will differ by region. Effective analysis concerning the environmental impacts of air emissions can only occur when one is able to identify which plants are running, where, the heat rate at which each is running, the emissions per unit of fuel burned, and the number of generation hours. To find answers and develop policy recommendation, staff must use system modeling.

IEP Comment 6

"It appears as if the data requirements are being determined by circular logic. Clearly, for staff's model to run 'accurately,' then from staff's perspective all data prescriptions are required and, therefore, 'needed.' IEP questions, however, the necessity and usefulness of the modeling and therefore the utility of the data. From this perspective, these data are not needed because they have little utility in accomplishing a Commission policy objective."³²

Staff's Rebuttal 6

Throughout this proceeding staff have tried to demonstrate that electricity system modeling is needed to address policy questions raised by the Energy Commission, the Legislature, Governor and the Public, and mandates in the Warren-Alquist Act and the Energy Commission's Strategic Plan. It is the Energy Commission's future electricity monitoring and policy-development functions that are driving the proposed data requirements. To perform the required analyses data is necessary to allow the Commission to accurately project loads and adequately model the electricity system.³³

³² IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 5.

³³ Ad Hoc Information Committee, CEC Docket 97-DC&CR, June 12, 1998, p. 6.

IEP comments imply that the costs and burdens of data collection (yet unspecified) should be the primary criteria for deciding the new data requirements, rather policies and mandates. It is unfathomable to staff that it is in the public's interest for their Energy Commission to put out future reports (e.g., California Energy Outlook 2000), analyses (e.g., dual fuel studies), and policy recommendations (e.g., 1999-2000 Budget Supplemental Language Item 3360-001-0465) based on data that is not regionally specific or up-to-date. Alternative agencies' data results in the use of data that is old (e.g., as of June, 1999, 1998 generator output data is not yet available on EIA websites). Alternative agencies' data results in the use of poor quality data (e.g., total generation for California as posted on the EIA website for 1996 and 1997 does not come close to matching generation reported in the California Statistical Abstract). And using data from old CFM filings and ECAC filings will result in a continued deterioration in the usefulness of electricity system modeling in formulating policy recommendations.

IEP Comment 7

“[T]he market risk to the generator, as well as to the public if this type of information became known to competitors, is not worth whatever precision (if any) that would derive from the staff having these data for modeling and estimation purposes.”³⁴

Staff's Rebuttal 7

The Energy Commission understands that some data elements are legitimate trade secrets, but each still needs to be collected, and will not be disclosed by staff. Moreover, the data is not being requested for modeling purposes. Models are tools. The Energy Commission requires the proposed data elements so that it can provide policy recommendations to the Legislature, Governor, and as mandated by the Warren-Alquist Act. The real danger to the public is failure of the Energy Commission to be able to monitor the newly-created competitive generation market and provide policy recommendations to correct market imperfections.

The Energy Commission has the ability to keep market sensitive data confidential. This is not an issue in this proceeding (see section 6 of these rebuttal comments).

IEP Comment 8

There is a contradiction between the April 28th Report and Committee clarifications concerning who develops emission factors.³⁵

Staff's Rebuttal 8

The contradiction IEP identified regarding emission factors is the result of statements pulled out of context from the Committee's April 28th report. Nowhere in the report is it stated that staff will estimate emission factors. If one reads all of page 20 in the report, including Table 7, within the content of section IV, the following conclusions can be made:

³⁴ *ibid.*, p. 5.

³⁵ *ibid.*, p. 6.

1. Emission factors are needed because these data support staff analyses to assess implications of AQMD regulations and attainment planning strategies. In addition, the Energy Commission has an extensive history of working with CARB to do electric vehicle impact assessments that rely on emission factor data and system simulations.
2. Emission factors will be collected for generators 50 MW or greater as part of the plant characteristics that will be updated every two years.
3. Reporting entities in cooperation with the regional AQMDs and CARB should develop emission factors using a CARB-certified methodology for estimation that uses CEM or other necessary data.

IEP Comment 9

Language in the report suggests that the Energy Commission would be expected to seek data from existing sources (e.g. governmental entities) and, if access were denied, the generator would then be expected to forward copies of these forms/filings to the Commission (and achieve equivalent confidentiality treatment).³⁶

Staff's Rebuttal 9

In several sections of the April 18th Report it is emphasized that the generators must report the required data to the Energy Commission according to the schedule in the proposed regulation. The Committee has, however, tried to align the data requirements in the proposed regulations to those required by other agencies and even allowing for the submission of other agencies' forms as a compliance options. The report then goes on to illustrate some of the compliance options. It is here that IEP has taken illustrations out of context to produce apparent contradictions between the report and the clarifying comments dated May 18, 1999. There are no contradictions. The Committee was very specific as to who is responsible for gathering the data and reporting it.

As required under past data collection practices, entities submitting data under these proposals would be required to attest to its accuracy and validity. **The proposal imposes an obligation for parties to provide data of the specific type requested**, of the best quality available, and according to schedule³⁷ [emphasis added].

IEP Comment 10

IEP comments contained an impact table identifying statements in the April 28th Report that it believes were wrong, inconsistent or oversimplified.³⁸

³⁶ idid., p. 6.

³⁷ Ad Hoc Information Committee, CEC Docket 97-DC&CR-1, April 28, 1999, p. 10.

³⁸ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, pp. 7-8.

Staff's Rebuttal 10

In **Table 3**, staff paraphrases IEP claimed impact in first column and provides our response in the second column.

Table 3
IEP Claimed Impact and Staff's Response

IEP Claim Impact	Staff's Response
1. Expand requirements to include all non-utility generators (NUGS) and increase frequency of filing.	<p>It is true that some market participants have additional reporting requirements; but, overall the burden by function has decreased.</p> <p>Increased frequency is only an additional burden if EIA has a different reporting period, not filing period or if the databases used to populate the data elements are non-existent.</p> <p>Emission factors are required for air quality regulatory purposes. We are requesting updates once every two years along with the plant characterization.</p>
2. Burden shifted from publicly funded Energy Commission to non-utility generators.	<p>One way to continue collecting authorized data is for the Energy Commission to continue a CFM process and apply it to all participants. The Committee, however, has streamlined this process and reduced costs for utility compliance by placing the responsibility of creating and maintaining plant characteristic databases onto staff.</p> <p>This is a substantial new requirement for Staff. NUGs are simply required to update the appropriate data fields and attest that the data is correct and up-to-date.</p>
. . . the most market sensitive data (e.g., O&M fixed and variable cost, heat rates by [block], etc.) are not reported to EIA or anywhere else.	Correct, that is why we need updates of this data once every two years .
Utilities report plant characteristic to EIA, NUGS do not.	Correct, that is why the Committee designed the proposed regulations to be reflective of functions and not ownership. The Energy Commission's responsibilities as mandated by the Warren-Alquist Act, its Strategic Plan, and requirements of the Legislature and Governor have not change simply because the utilities' plants have been divested to NUGS.
NUGs do not report these data to the ISO and/or PX. Perhaps these entities have this data as a function of operations, but NUGS are not required to compile periodic reports and submit them to these entities.	Where did these entities get this data?
Inconsistency: Report indicates that "emission factors" should be developed in cooperation with the regional AQMDs and CARB.	Taken out of context, see Staff's response above.

Table 3 (continued)
IEP Claimed Impact and Staff's Response

IEP Claim Impact	Staff's Response
Inconsistency: The report states its intention to place "only minor data-collection responsibilities on new market participants such as independent generators."	<p>In comparison to current data regulations, the proposed regulations are streamlined. The proposed regulations align databases used to meet EIA and other agencies reporting requirements to those of the Energy Commission.</p> <p>Differences in reporting deadlines do not create new data collection responsibilities. They do, however, create minor costs of reporting data more frequently to the Energy Commission than to EIA.</p>
<p>Oversimplification:</p> <ol style="list-style-type: none"> 1. increases the universe of units reporting 2. increases the number of times report is filed by 400% 3. expands the data reported to include proprietary, competitive information such as price, cost, and emission factors 	See section 2 of these rebuttal comments and staff's response to IEP comment 2.
Inconsistency: between pages 11 and 22, the Report states that this capacity group (i.e., less than 10 MW, regardless of ownership would be required to file this modified form annually.	Page 11 is part of the introduction section, which is providing a general overview. The reporting frequency on page 22 for facilities greater than 1 MW and less than 10 MW.
<p>NUGs report Plant Identifiers to EIA</p> <p>NUGs report Fuel Type to EIA</p> <p>NUGs report Plant Capacity to EIA</p>	To the degree that NUGS report these to EIA, each can be used as a compliance option. However, the fact that these data elements are reported to EIA should not be construed as the condition that makes them required data under the proposed regulations.
<p>NUGS do not report average heat rates by block.</p> <p>NUGS do not report expected forced outage rates.</p> <p>NUGS do not report maintenance schedules.</p> <p>NUGS do not report start-up time.</p> <p>NUGS do not report start-up energy.</p> <p>NUGS do not report O&M costs.</p> <p>NUGS do not report fuel costs.</p> <p>NUGS do not calculate or report emission factors.</p>	Correct, therefore for the Energy Commission to develop viable policy recommendations over the life of these proposed regulations NUGS must update the biennial plant characteristic database sent to them.

IEP Comment 11

“. . . [T]he Committee Report fails to comport with key policy conclusions articulated in the Ad Hoc Information Committee Report on the Energy Market Information Proceedings (June 12, 1998), namely:

1. 'The Committee fully intends to pursue data-collection methods that are not overly burdensome and that embody a least-cost approach to data acquisition for data necessary to support the Commission's core functions.'

2. ‘The Committee’s goal for this rulemaking is to identify and develop the **most efficient, equitable and cost-effective methods** for getting the data we need to carry out our market monitoring and policy development responsibilities.’ (Emphasis added)³⁹

Staff’s Rebuttal 11

IEP seems to interpret the Committee’s principles as apply only to reducing costs of non-utility generators. Whereas, staff interpret the principles as applying to all market participants—non-utility generators, utilities, and staff. Staff collection of all data elements from alternative sources, provided the data was available, would result in no costs for generators by shifting those costs to the public and imposing significant resource commitments on staff, causing overall data collection efficiency to fall.

The Committee has gone a long way in reducing cost burdens compared to the current Energy Commission data regulations. The generator output and fuel use reporting requirements align the required data elements to those collected by other agencies and/or used by the generator in its normal business operations. A variety of compliance options are available. And, staff has been delegated the main responsibility of developing and maintaining the plant characteristic database. Generators are only required to update the database once every two years and “attest to its accuracy and validity”.⁴⁰

It is true that some market participants have additional reporting requirements; but, overall, the burden by function has decreased. This is especially true regarding the proposed method of collecting power plant characteristics in comparison to CFM filings. For facilities with a capacity of less than 10 MW, there are no plant characteristics reporting requirements. The data elements of fuel type, dependable capacity, and thermal capacity will be taken from the interconnected load databases filed by distribution utilities. For facilities with a capacity 10 MW and greater and less than 50 MW the aforementioned data elements will be taken from the same source. And these facilities will be permitted to use generic values by technology type for the data elements of block heat rates, equivalent forced outage rate, ramp rates, outage rates, cold start-up time and energy, warm start-up time and energy, minimum down time, minimum up time, hydro data, pumped storage data. Facilities 50 MW and greater would be required to update staff’s database of plant characteristics once every two years. All facilities 1 MW or greater would be required to provide contract type (e.g., QF, RMR and other non-market arrangements).

Rebuttal To Southern Energy Incorporated (SEI) Comments

SEI Comment 1

“SEI is very concerned about providing competitively sensitive information that could be used to our disadvantage by competitors or potentially misinterpreted and used against us in regulatory proceedings.”⁴¹

³⁹ IEP Comments, CEC Docket 97-DC&CR, June 7, 1999, p. 2.

⁴⁰ Ad Hoc Information Committee, CEC Docket 97-DC&CR-1, April 28, 1999, p. 10.

⁴¹ Southern Energy Inc., CEC Docket 97-DC&CR-1, June 9, 1999.

Staff's Rebuttal 1

The Energy Commission has the ability to keep market sensitive data confidential. This is not an issue in this proceeding (see section 6 of these rebuttal comments).

SEI Comment 2

“The CEC staff has clearly stated its intent to use the data collected from generators to conduct market monitoring operations, presumably to complement market monitoring activities currently carried on by the Power Exchange’s Market Monitoring Committee, the ISO’s Market Surveillance Committee, and other organizations.”⁴²

Staff's Rebuttal 2

Market monitoring is just one example among varied analyses that has been identified in this proceeding. Staff have tried to demonstrate that electricity system modeling is needed to address anticipated policy questions that will be raised by the Energy Commission, the Legislature, Governor, the Public, and mandates in the Warren-Alquist Act and the Energy Commission’s Strategic Plan.

SEI Comment 3

“... California generators are part of a region-wide market, and that entities outside of California, not subject to CEC reporting requirements, will be participating in the market.”⁴³
“Collecting precise data for certain aspects of the model while depending on more generalized for other parts negates the value of precise data.”⁴⁴

Staff's Rebuttal 3

Not having precise data on out-of-state generation does present a problem. Staff, however, is coordinating the collection of certain out-of-state generation data for the certificate pilot program of SB 1305. Also, the effects on modeling is limited and controlled for due to import transmission constraints. Borenstein, et al, illustrated practical modeling assumptions that could be used given quality in-state-generation data and limited out-of-state generation.

SEI Comment 4

“While there is no question that the theory behind the premise that generators will bid their short run marginal costs and that makes the PX work, it is the exception that proves the rule. There are other, potentially non-rational, certainly not measurable elements that go into daily bidding

⁴² *ibid.*, p. 2.

⁴³ *ibid.*

⁴⁴ *ibid.*

strategy. Unit availability, fuel purchase commitments, internal performance measures, existing bilateral commitments, and human error can all impact actual bidding behavior.”⁴⁵

Staff’s Rebuttal 4

See section 4 of these rebuttal comments.

SEI Comment 5

The Commission’s approach to obtaining fuel cost data is an excellent example of how to use publicly available information to do analysis. Since market price information is available for natural gas at various delivery points, using that instead of proprietary cost data achieves the need for useful information without requiring release of competitively sensitive information. This approach should be the model for all data acquisition in this process.

Staff’s Rebuttal 5

For clarification of the fuel cost data requirement see section 5 of these rebuttal comments.

The Committee proposed separate generator output and fuel use data requirements and plant characteristic database requirements because the required data elements are used for expressly different purposes. Generator output and fuel use data are used to explain what did occur (e.g., used as part of the monitoring and data dissemination functions of the Energy Commission). Plant characteristics data are used to produce forward-looking policy recommendation based on what might occur (e.g., as part of the California Energy Outlook, policy recommendations as required by the Legislature).

SEI Comment 6

Generator heat rate and O&M cost information for existing units can be gotten from historic data or other sources (FERC filed RMR contract have detailed heat rate and O&M costs for most generators). “Educated guesswork” should be sufficiently accurate to fill in any gaps for existing units. For new units, the CEC can rely on AFC process, turbine manufacturers and other sources.

Staff’s Rebuttal 6

Staff will be populating many of the data elements in the plant characteristic databases with information from the sources identified by SEI. And we hope that SEI will help staff find specific contacts for some of these data sources (e.g., staff has managed access to RMR contract documents, but not the individual contracts). Not all of the data elements, however, are available.

⁴⁵ *ibid.*

In the near-term, analytical studies to predict system-wide impacts such as regional market clearing prices, reliability, emissions, etc. would not be seriously compromised by the use of existing data or estimation. But, the proposed regulations have data availability implications far into the future. As time passes the applicability of existing data sets will degrade.

Rebuttal to Mammoth-Pacific LP Comments⁴⁶

The EIA forms listed in report for 10-50 MW generators are not the forms actually required by EIA. Of their eight facilities, none report monthly or quarterly data of any kind to EIA. This represents at least a 1200% increase in their annual reporting requirements.

Staff's Rebuttal

Mammoth-Pacific LP is correct. This class of generators is not required by EIA to file a form requiring monthly frequency. But this does not cause a 1,200 percent increase in reporting burdens (see section 3 in these rebuttal comments).

Rebuttal To San Diego Gas & Electric's (SDG&E) Comments

SDG&E Comment 1

"SDG&E continues to have concerns about the confidentiality of certain data. Information about prices and usage is extremely sensitive."⁴⁷

Staff's Rebuttal 1

See section 6 of these rebuttal comments.

SDG&E Comment 2

"If statistical sampling were used, that would protect individual information regarding interconnected generators or customers without having to go to the generator or the customer for permission to obtain data".⁴⁸

Staff' Rebuttal 2

The data elements being requested from the utilities on interconnected load are the owners' names, addresses, telephone numbers, and installed generator nameplate capacity. At the May 10, 1999 Hearing utilities expressed concerns about data confidentiality for interconnected generation of less than 1 MW. For interconnected load greater 1 MW or greater this information is reported to EIA. For generation less than 1 MW there are options that could alleviate this concern, for example utilities could:

⁴⁶ Mammoth-Pacific LP, CEC Docket 97-DC&CR-1, May 20, 1999.

⁴⁷ Sempra Energy, CEC Docket 97-DC&CR-1, June 8, 1999, p.1.

⁴⁸ Ibid.

1. aggregate the installed connected capacity by technology type and zip code prior to providing the data; or,
2. strip the names and address from the database; or,
3. identify a cutoff based on size.

The Committee's approach, however, would not result in confidentiality breaches because the non-disclosable data would be kept confidential as provided under Energy Commission's data regulations (see section 6).

Rebuttal To SCE's Comments

"Imposing extensive reporting requirements on UDCs for 'all interconnected facilities regardless of size' represents a potential reporting burden for the UDCs (depending also on the extent of required variables) and seems inconsistent with the principle that entities performing equivalent functions should have equivalent reporting responsibilities, and with the goals of eliminating the utility as an intermediary and reducing reporting requirements. As the Commission is aware, there may be a rapid increase in the number of small distributed generation units over the next few years"⁴⁹

Staff's Rebuttal

Staff agrees with SCE that number of small distributed generation units could increase over the next five years. That is why the basic data elements of the interconnected load are being requested. Having basic information on distributed generation will allow the Energy Commission to analyze and track this new generation source. Also see staff's response to SDG&E's comment 2.

⁴⁹ Southern California Edison Company, CEC Docket 97-DC&CR-1, May 10, 1999, p.1.